GE Panametrics

Two-Channel TransPort Data Manager

December 2003

Process Control Instruments

Two-Channel TransPort Data Manager

User's Manual *910-132B*

GE Panametrics

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Chapter 1

What is TransPort Data Manager?

The TransPort Data Manager (TDM) is a PC-based non-resident software program specially designed to use with the Two-Channel TransPort PT868 Portable Liquid Flowmeter.

IMPORTANT: *This version of TDM is only compatible with a Two-Channel TransPort® Flowmeter.*

TDM is a useful tool for loading logged parameters into various types of spreadsheets. If a spreadsheet program is not available to you, TDM provides a graph feature that enables you to display logged parameters in a line graph. The graph feature is helpful for comparing logged data from various sites. You can also view live measurements on your PC screen such as velocity, volumetric flow, forward and reverse totals.

In addition, TDM lets you edit and store site and log data on your PC. You can later download this data to one or more TransPort flowmeters, eliminating the need to program multiple units.

GE Panametrics supplies a special cable to connect your PC to the TransPort RS232 communications port. Use the following instructions to install and operate your TDM software.

If you have any questions, contact GE Panametrics at the nearest address listed below:

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E-Mail: info@panametrics.ie

Web: www.gepower.com/panametrics

Chapter 2

Installing TDM

In order to use TDM, you must install it on your PC's hard drive and then make any necessary changes to the TDM configuration file.

To run TDM correctly, make sure your computer has the required hardware, and that you make all necessary connections.

Use the following sections to set up and install TDM properly:

- Hardware Requirements
- Connecting the TransPort to the PC
- Installing TDM
- Modifying the TDM Configuration File
- Starting TDM

Hardware Requirements

TDM requires an IBM 286/or better, or a compatible computer (including laptops). Your computer should run no slower than 12 MHz. We recommend 20 MHz for optimum performance. Your computer should meet the following requirements:

- RS232 standard serial interface
- 640 K bytes of RAM
- Math co-processor (not required, recommended)
- At least one high-density disk drive
- A hard drive with at least one megabyte available for storing the program, plus adequate space to store site and log parameters.
- A graphics board:
  - IBM VGA or equivalent (recommended board)
  - IBM EGA or equivalent
  - Hercules Monochrome Graphics Card or equivalent
- A mouse (not required, but recommended):
  - Microsoft Mouse (serial or bus)
  - IBM PS/2 Mouse
  - Mouse Systems PC Mouse, or equivalent
  - Any mouse compatible with the above standards
- MS-DOS or PC-DOS version 3.3 or higher
- Any type of parallel printer connected to LPT1 on your PC

Connecting the TransPort to the PC

Use the GE Panametrics-supplied RS232 cable to connect the 6-pin phone-type RS232 port connector on the TransPort (see Figure 2-1 below) to the serial port on your PC. Refer to Chapter 2, *Initial Setup,* in your *TransPort User's Manual* for more information.

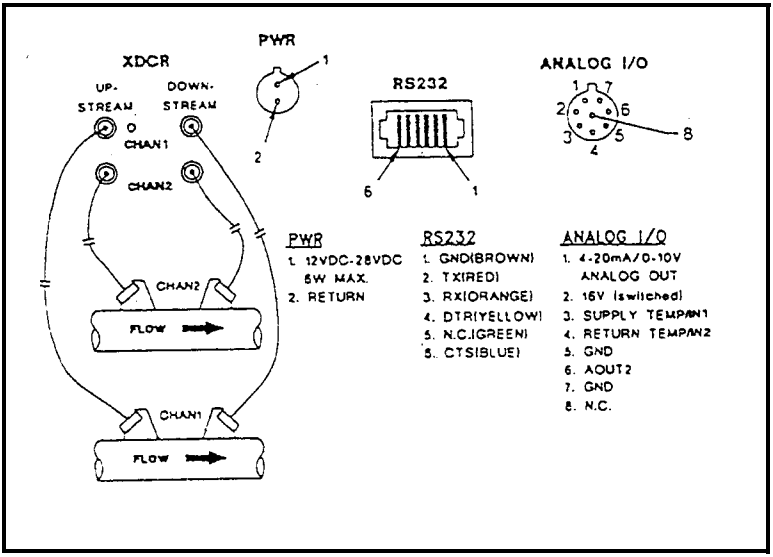


Figure 2-1: RS232 Connection on the TransPort Flowmeter

Installing TDM

To install TDM, you must copy the TDM files into a directory on your PC's hard disk. Make backup copies of your source disk to guard against accidental damage. (Refer to Appendix A to make copies using MS-DOS.)

Use the following steps to install TDM on your PC's hard disk:

Note: *The following steps are based on MS-DOS version 5.0 and may vary depending on which version of MS-DOS you are running. Consult your MS-DOS manual.*

The ∧ symbol represents a space.

1. Turn on the computer and monitor.
2. Insert the TDM disk into drive `a`.
3. Close the drive door.
4. At the `C:\` prompt, type `md∧TDM` and then press the **ENTER** key.

When the `C:\` prompt appears again, this indicates that your computer has created a directory named TDM.

5. Copy the TDM files into the TDM directory by typing `copy∧a:*.*∧C:\TDM` and pressing the **ENTER** key.

The following message appears on the screen:

```
A: TDM.EXE
A: TDM.CFG
     2 File(s) copied
```

This message indicates the computer has successfully copied the TDM files on the TDM disk into the TDM directory on your hard drive C.

Modifying the TDM Configuration

TDM has its own configuration file, TDM.CFG, that automatically selects the communication port and the baud rate. COM2 is the default location for the TransPort connection and 9600 is the default baud rate. If you want to choose COM1 as the default or set a new default baud rate, you must edit the TDM.CFG file.

To edit your TDM.CFG file, use the MS-DOS Editor or a text editor that saves files as unformatted (ASCII) text. Use the following steps to edit your TDM.CFG file using the MS-DOS Editor.

Note: *The following steps are based on MS-DOS version 5.0 and may vary depending on which version of MS-DOS you are running. Consult your MS-DOS manual.*

Editing the Configuration File

1. Type `edit␣C:\TDM\TDM.CFG` and press **ENTER**.

The MS-DOS Editor starts with the TDM.CFG file loaded. The following line should appear on the MS-DOS Editor screen:

```
port=COM2
```

2. Use the arrow keys to position the cursor over the `2` at the end of the `port=` line.

3. Press the **DELETE** key.

4. Type **1** (or the selected COM port).

At this point, you can skip to *Saving the Configuration File* on the next page, or continue with steps 5 through 8 to set up a default baud rate.

5. Use the arrow keys to move the cursor to the end of the `port=` line.

Editing the Configuration File (cont.)

6. Press **ENTER**.
7. Type one of the following lines depending on the desired baud rate.

```
baud=300
baud=600
baud=1200
baud=2400
baud=4800
baud=9600
baud=19200
```

8. Press **ENTER**.

You have completed editing the TDM.CFG file. Proceed to the next section.

Saving the Configuration File

1. Activate the File Menu (**ALT+F**).
2. Select Save (**S**).

Your computer overwrites the old TDM.CFG file and replaces it with the new one.

3. To exit the MS-DOS Editor, activate the File Menu again (**ALT+F**).
4. Select Exit (**X**).

You have completed modifying your TDM.CFG file. Proceed to the next section.

Starting TDM

Use the following steps to run TDM:

1. If necessary, power up your PC.
2. Turn the TransPort on and wait for the unit to complete its power up series.
3. At the `C:\` prompt, type `cd\TDM`.

Note: *To eliminate changing the directory each time you enter TDM, include the C:\TDM directory in the PATH command in your AUTOEXEC.BAT file .*

4. Type `TDM`.

Your computer loads TDM. A window similar to Figure 2-2 below appears.

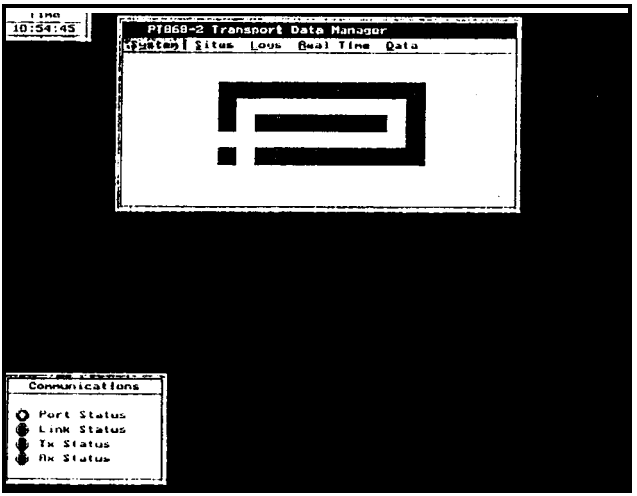


Figure 2-2: TDM Screen

Starting TDM (cont.)

IMPORTANT: *Each time you run TDM, the program automatically uploads the TransPort's system data. If you connect a different TransPort flowmeter while TDM is still running, you must upload the system data from the new flowmeter using the Upload System Data menu command as described in Chapter 4.*

You are now ready to use TDM. Refer to the following chapter.

Chapter 3

User Interface

This chapter describes the basic components of TDM and how to use them. It describes the following:

- How TDM Works
- Mouse Operations
- Keyboard Operations
- Main Screen
- Retrieving and Saving Files on Disk
- Retrieving and Saving Files on the TransPort

How TDM Works

TDM can save and retrieve data from the TransPort's memory or your PC's memory.

TDM automatically uploads the system data (flowmeter identification and software version) from the TransPort's memory when needed.

Most TDM commands access the TransPort's memory to retrieve the necessary data. When you exit the commands, any changes you made on the PC are automatically downloaded back to the TransPort's memory.

TDM also has commands that let you save and retrieve site sets and logs on your PC. Any time TDM accesses your PC's memory, the program asks you to specify where you want the files saved to or retrieved from (the PC's hard disk or floppy disk).

Note: *Some of the TDM commands only enable you to use the TransPort's memory; therefore, you will not have the option of using the PC's memory.*

Mouse Operations

The mouse pointer has three separate functions within TDM. The mouse pointer changes shape depending on the task you are performing:

When the mouse pointer is shaped like an arrow, use it to move the mouse cursor to items on the screen that you want to select. You can also use it to scroll through a list of files in a dialog box. Select items by placing the arrow anywhere over the selection and then pressing the left mouse button once.

When the mouse pointer changes to an I-beam, use it to enter a name or number. Place the I-beam over the desired location and press the left mouse button, then use the keyboard keys to enter the desired information.

When the mouse pointer changes to a hand, use it to move a window from one location to another.

TDM uses only the left mouse button.

Keyboard Operations

You can use your PC keyboard to perform the same procedures you do with your mouse. Notice that all menus and menu commands have one letter underlined. To access a menu or menu command using the keyboard, press the key that corresponds to the underlined letter.

Frequently, after you enter a menu command, TDM may display a dialog box that asks you for more information. Notice that each of the options within the dialog box also have one letter underlined. To access these options, hold down the **ALT** key and then press the corresponding letter.

Many of the other keyboard keys perform special functions:

- **TAB** - moves the text cursor forward to the next entry field (when within a dialog box) or selection.
- **SHIFT +TAB** - moves the text cursor back to the previous entry field.
- **ENTER** - enters the selected or highlighted information within a dialog box or menu.
- **CONTROL + C** - exits TDM from anywhere in the program.
- **Arrow keys** - control the movement of the I-beam cursor, scroll through the list of files in a dialog box and highlight selections in pull down menus.

Main Screen

The Main Screen consists of the clock window, the work area window, and the communications window (see Figure 3-1 below).

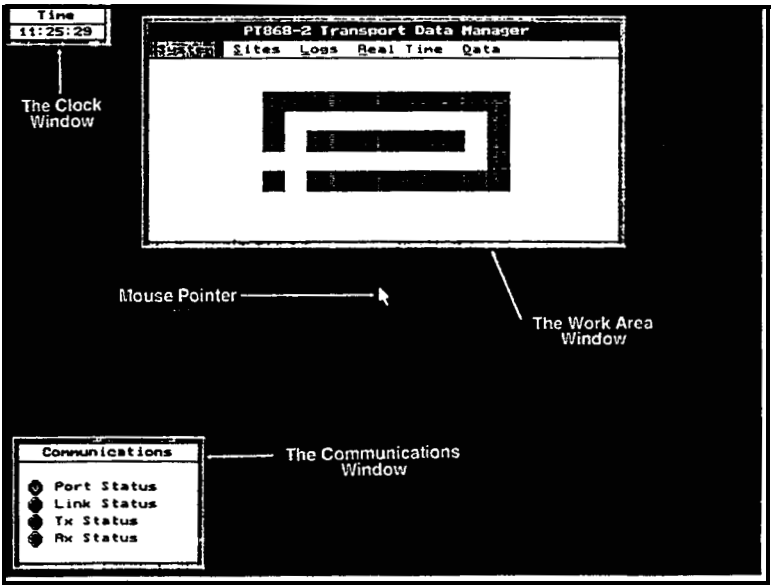


Figure 3-1: Window Locations on the TDM Screen

- The clock window displays the current time. It also indicates when TDM is performing a task by displaying "Wait..." in the bottom half of the window. This window is used as an indicator box only; it cannot be edited.
- The work area window consists of the five menus that you can use to select all TDM menu commands.
- The communications window shows the communication status between your PC and the TransPort flowmeter. The Port and Link Lights indicate when an error occurs; and the Tx and Rx Status lights indicate when data is being communicated. These status indicators are used by GE Panametrics for troubleshooting purposes.

Main Screen (cont.)

You can move these windows to different locations on the screen if you desire; however, when you exit TDM, the windows will be returned to their original locations.

Note: *You cannot use the keyboard to relocate windows.*

To move a window:

1. Place the mouse cursor over the top of the window you want to move.
2. When the mouse cursor changes to a hand, press and hold down the left mouse button.
3. Move the mouse to move the window to the new location.

As you move the mouse pointer, an outline of the window moves with it.

4. Release the mouse button.

Retrieving and Saving Files on Disk

Many of the TDM commands give you the option of retrieving and saving files on a floppy or hard disk. Each time you choose to retrieve or save a file on disk, a window similar to Figure 3-2 below appears.

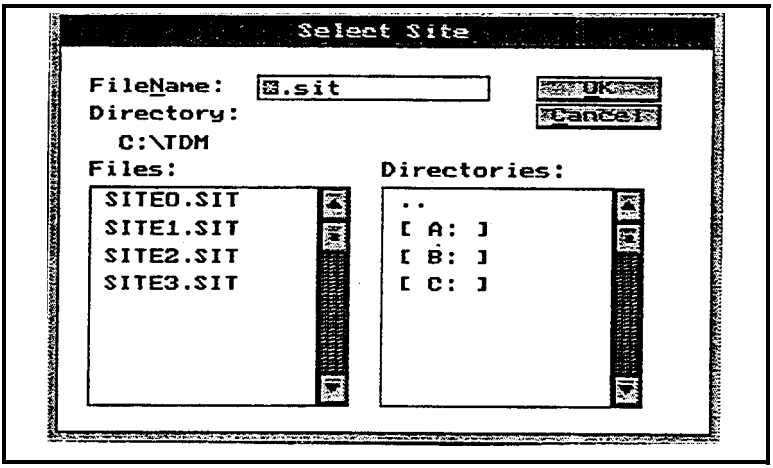


Figure 3-2: Retrieving or Saving Files on Disk

Follow the steps below to perform the desired task:

1. If you want to retrieve or store a file from a floppy disk, insert it into the PC's disk drive.
2. Select the desired directory (**TAB** and **ENTER**) from the **Directories** box. The selected directory appears on the **Directory** line.

Retrieving a File from Disk

1. Select the desired file (**TAB** and **ENTER**) from the Files box. The selected file appears in the FileName box.

Note: *To scroll through all the available files in the list, place the mouse cursor over the downward arrow on the right side of the list box and press the left mouse button. The **TAB** key performs the same function.*

2. Select **OK (ALT+O)**.

TDM retrieves the selected file.

Saving Files to Disk

When you save a file, you can use a new name or overwrite and existing file.

A. New Name

1. Move the mouse cursor (**TAB**) to the **FileName** box and type in the new file name.
2. Select **OK (ALT+O).**

TDM names the file.

B. Overwrite a File

1. Move the mouse cursor to the Files box and select the file you want to overwrite (**TAB** and **ENTER**). The file name appears in the **FileName** box.

Note: *To scroll through all the available files in the list, place the mouse cursor over the downward arrow on the right side of the list box and press the left mouse button. The **TAB** key performs the same function.*

2. Select **OK (ALT+O).**

TDM overwrites the existing file.

Retrieving and Saving Files on the TransPort

Many of the TDM commands give you the option of retrieving or saving files using the TransPort's memory. Each time you choose to retrieve or save a file on the TransPort, a window similar to Figure 3-3 below appears.

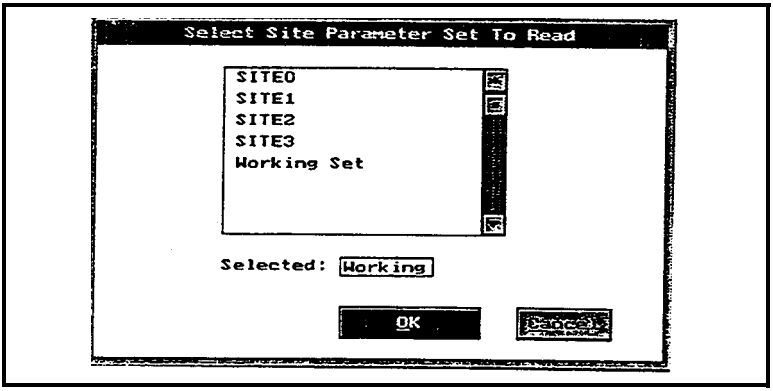


Figure 3-3: Retrieving or Saving Files on the TransPort

Retrieving a File

1. Select the desired file from the list (**TAB** and **ENTER**). The file name appears in the Selected box.

Note: *To scroll through all the available files in the list, place the mouse cursor over the downward arrow on the right side of the list box and press the left mouse button. The **TAB** key performs the same function.*

2. Select **OK (ALT+O)**.

TDM retrieves the selected file from the TransPort's memory.

Saving a File

TDM enables you to save the file using a new name or overwrite an existing file.

A. New Name

1. Select **New Site (ALT+N).**
2. Enter the desired site name in the space provided.
3. Select **OK (ALT+O).**

B. Overwrite a File

1. Select the desired file from the List box (**TAB** and **ENTER**). The file name appears in the **Selected** box.

Note: *To scroll through all the available files in the list, place the mouse cursor over the downward arrow on the right side of the list box and press the left mouse button. The **TAB** key performs the same function.*

2. Choose **Selected Site (ALT+S).**

TDM overwrites the existing file.

Chapter 4

Selecting Menus and Menu Commands

TDM has five menus each containing one or more menu commands. You can access all the menus and menu commands using the mouse or keyboard. (Keyboard strokes are shown in parentheses throughout this chapter.)

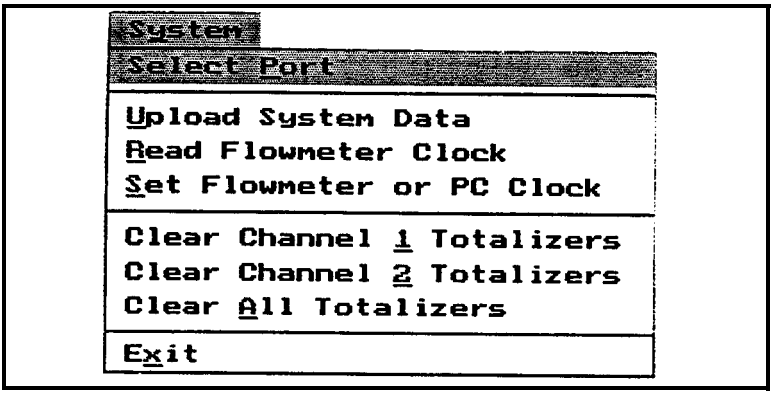
IMPORTANT: *When operating TDM, do not press any of the keys on the TransPort keypad. You should use your mouse or the PC's keyboard to control communication. Also, make sure the TransPort is not in one of its menus such as Program, Display, Print, Log, etc.*

TDM consists of the following menus:

- System Menu - contains commands for communications between your PC and the TransPort.
- Sites Menu - lets you retrieve, modify, view, create and save site parameter files.
- Logs Menu - enables you to retrieve, modify, delete and create data logs.
- Real Time Menu - lets you view or log velocity, volumetric flow, forward and reverse totals, as well as other live measurements on your PC screen.
- Data Menu - displays logs in a line or bar graph, sends a log to a printer or prints logs to a file that can be imported into a spreadsheet program.

The commands associated with the above menus are described in the following sections.

System Menu



The System Menu consists of the following commands:

- **Select Port** - enables you to select the PC communication port to which the TransPort is connected.
- **Upload System Data** - transmits system data that consists of the flowmeter identification and software version from the TransPort's memory to your PC.
- **Read Flowmeter Clock** - displays the PC and TransPort current date and time.
- **Set Flowmeter Clock** - lets you edit or synchronize the TransPort and PC date and time.
- **Clear Channel 1 Totalizers** - resets the forward and reverse totals to zero for channel 1.
- **Clear Channel 2 Totalizers** - resets the forward and reverse totals to zero for channel 2.
- **Clear All Totalizers** - resets the forward and reverse totals to zero for both channels.
- **Exit** - exits the TDM program.

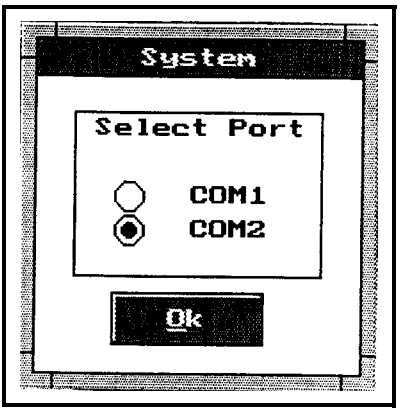
Select Port

TDM defaults to Com2, which is the communication port specified in the TDM.CFG file (see *Modifying the TDM Configuration File*). Therefore, you only need to use the **Select Port** command if you wish to choose a different communication port.

Note: *If you are using a serial mouse and select the port that your mouse is connected to, the mouse will be disabled. If this happens, exit TDM using* **CTRL C***, reboot your PC, and enter TDM again.*

To select a communication port:

1. Choose the Select Port command (**Y** and **P**). The following window appears.



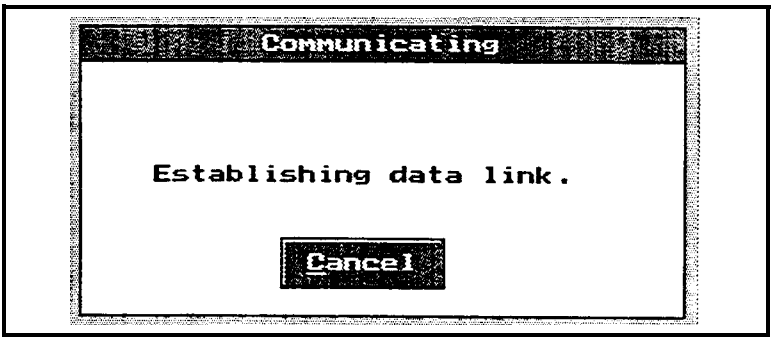
2. Select the desired communication port (**TAB** and **ENTER**).
3. Select **OK** (**ALT+O**).

TDM is now configured for the desired communication port.

Upload System Data

Each time you run TDM, the program automatically uploads system data from the TransPort's memory. System data consists of the flowmeter identification, software version, channel and log information. If you connect a different TransPort flowmeter while TDM is still running, you must use this command to upload the system data from the new flowmeter.

To upload system data, select the **Upload System Data** command (**Y** and **U**) from the System Menu. Once selected, a window similar to the one below appears.



When this message clears, all data has been successfully uploaded. To cancel the upload, select **Cancel (ALT+C)** while the above window appears.

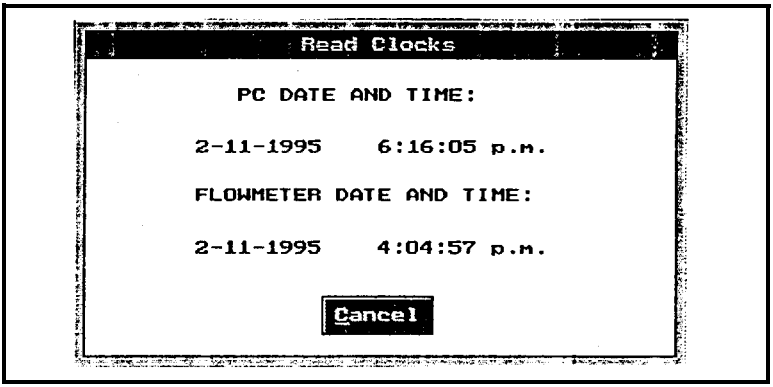
Read Flowmeter Clock

The third command in the System Menu is **Read Flowmeter Clock**. This command displays the current date and time of both the TransPort and your PC.

If you want to edit the date and time of your flowmeter, use the **Set Flowmeter or PC Clock** command described on the next page.

To view the date and time:

1. Select the **Read Flowmeter Clock** command (**Y** and **R**). A window similar to the one below appears:



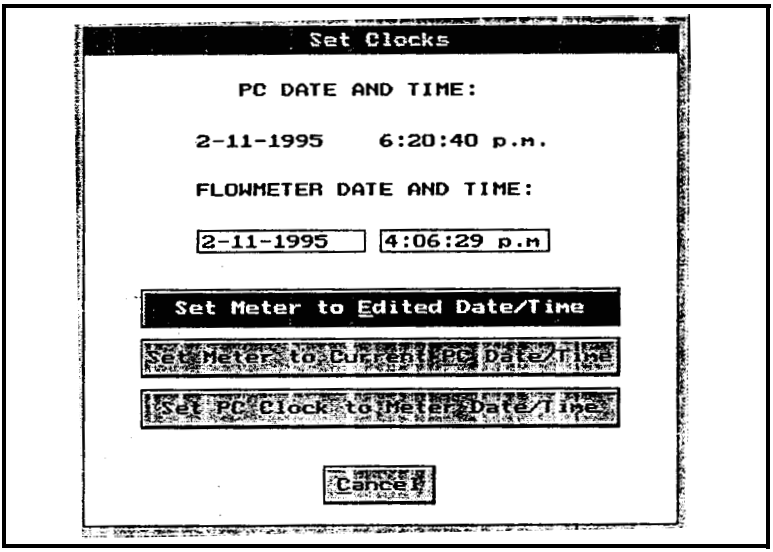
2. To exit, select **Cancel** (**ALT+C**).

Set Flowmeter or PC Clock

This command enables you to edit the current date and time for the TransPort. It also lets you synchronize the TransPort clock to the PC clock or vice versa. Synchronization is accurate to one second.

To set the clock:

1. Select the **Set Flowmeter or PC Clock** command (**Y** and **S**). A window similar to the one below appears.



Set Flowmeter or PC Clock (cont.)

To synchronize clocks:

1. Use the mouse to select one of the following:
   - Set Meter to Current PC Date/Time (**ALT+P**), or
   - Set Meter Clock to Meter Date/Time (**ALT+M**)

TDM synchronizes the TransPort clock to the PC clock and automatically exits.

To edit the TransPort clock:

1. Use the mouse (**TAB**) to move the cursor to the desired location to edit. You can only edit information enclosed in the boxes.
2. Use the keyboard to enter the desired values.
3. Select **Set Meter to Edited Date/Time** (**ALT+E**).

TDM changes the TransPort or PC clock and automatically exits to the Main Screen.

Clear Flowmeter Totalizers

The next three commands enable you to reset the forward and reverse totalizers for channel 1 and 2 individually or simultaneously. Use the steps below to clear the TransPort's totals:

1. Activate the System Menu (**Y**).
2. Select one of the following:
   - Clear Channel 1 Totalizers (**1**)
   - Clear Channel 2 Totalizers (**2**)
   - Clear All Totalizers (**A**)
3. Use the mouse or keyboard
   - to select **Yes** (**ALT+Y**) to clear the totalizers.
   - to select **No** (**ALT+N**) to cancel this function.

TDM automatically exits to the Main Screen.

Exit

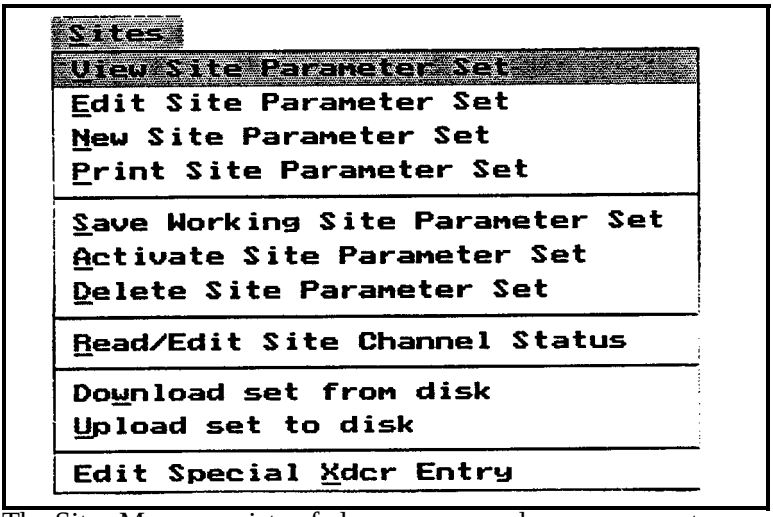
To exit TDM:

1. Select the **Exit** command (**Y** and **X**). A window similar to the one below appears.

Note: *To exit TDM at any time, press* **CTRL+C**.

2. Use the mouse or keyboard
   - to select **OK** (**ALT+O**) and exit TDM.
   - to select **Cancel** (**ALT+C**) and return to TDM.

Sites Menu



The Sites Menu consists of eleven commands you can use to view, modify, create, delete, print, and recall site parameter sets. The Sites Menu also lets you save site parameter sets to your PC or a floppy disk for storage and then later download them into the TransPort's memory.

The Sites Menu consists of the following commands:

- **View Site Parameter Set** - lets you view stored site parameter sets.
- **Edit Site Parameter Set** - lets you edit stored site parameter sets.
- **New Site Parameter Set** - lets you create a new site parameter set.
- **Print Site Parameter Set** - lets you print the desired site parameter set.
- **Save Working Site Parameter Set** - enables you to save the working site parameter set.
- **Activate Site Parameter Set** - retrieves a stored site parameter set.The recalled set becomes the working site parameter set.

Sites Menu (cont.)

- **Delete Site Parameter Set** - enables you to delete unwanted site parameter sets.
- **Read/Edit Site Channel Status** - enables you to check or change whether a channel is active or disabled.
- **Download Set from Disk** - copies site parameter sets from the PC's hard disk or a floppy to the TransPort.
- **Upload Set to Disk** - copies site parameter sets from the TransPort's memory to the PC's hard disk or a floppy.
- **Edit Special Transducer Entry** - enables you to edit the transducer number, wedge type, frequency, etc. stored in the TransPort's memory for special transducers.

The TransPort stores site parameter sets in RAM. The **Activate Site Parameter Set** command determines which site parameter set the TransPort will use to take measurements. Each site parameter set contains site information for each channel.

When you ACTIVATE a site parameter set, the TransPort makes a copy of the selected set, calls it the Working Site Parameter Set, stores it in the TransPort's RAM, and uses it to make measurements.

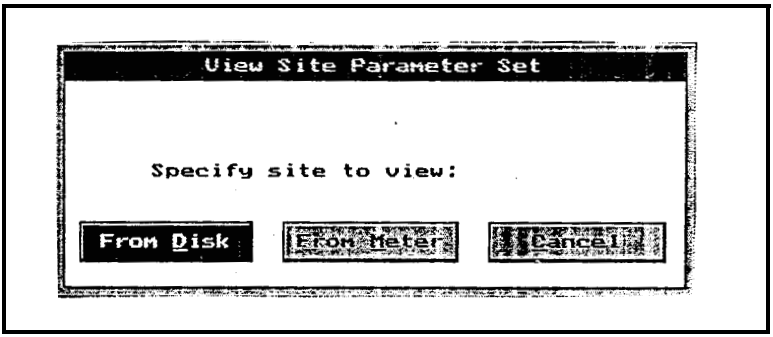
TDM lets you modify stored site parameter sets and the working site parameter sets. Therefore, if you ACTIVATE a site parameter set and then make changes to that set using TDM and save it using the same name, the new stored set and the working set will no longer be the same. For example, if you activate a set named SITE1, SITE1 becomes the working site parameter set. If you decide to edit SITE1 using TDM, when you complete making changes and save the set using the same name, TDM only overwrites the stored site parameter set. The working site parameter set, SITE1, remains unchanged.

If you want to use the new site parameter set to make measurements, you must either use the Activate Site Parameter Set command or save it to the working set when done editing.

View Site Parameter Set

This command enables you to view any stored site parameter set. To view a site parameter set, do the following:

1. Select the **View Site Parameter Set** command (**S** and **V**). Once you enter this command, a window similar to the one below appears.



2. Choose one of the following options:
   - **From Disk** (**ALT + D**) to view a site set stored on your PC's hard disk or floppy.
   - **From Meter** (**ALT + M**) to view a site set stored on the TransPort's memory.
   - **Cancel (ALT + C)** to exit this command.
3. Select the desired set. For more information on retrieving files, refer to Chapter 3.
4. Choose one of the following options:
   - **Global (ALT+G)** to view global parameters such as system, input/output, communications options, etc.
   - **Chnl 1 (ALT+1)** to view channel 1 parameters.
   - **Chnl 2 (ALT+2)** to view channel 2 parameters.
   - **Exit (ALT+X)** to exit this menu.

View Site Parameter Set (cont.)

TDM retrieves the specified information and displays it. Since there is limited space on the screen, TDM displays system, pipe, input/output, and setup parameters in different windows.

5. Use the following options (located at the bottom of each window) to switch from one window to another:

Note: *All or some of the following options will appear, depending on the window you are currently viewing.*

- **Prev (ALT+P)** switches to the previous window.
- **Next (ALT+N)** switches to the next window.
- **Close (ALT+C)** exits the view windows.

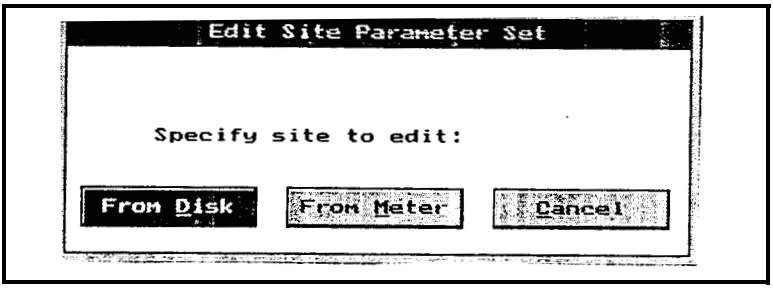
6. You can now either select additional parameters to view or exit.

Edit Site Parameter Set

This command enables you to edit any stored site parameter set and then save the changes to a new set or overwrite an existing set.

Editing a Set

1. Select the **Edit Site Parameter Set** command (**S** and **E**). Once you enter this command, a window similar to the one below appears.



2. Choose one of the following options:
   - **From Disk (ALT+D)** to edit a site set stored on your PC's hard disk or floppy.
   - **From Meter (ALT+M)** to edit a site set stored on the TransPort's memory.
   - **Cancel (ALT+C)** to exit this command.
3. Select the desired set. For more information on retrieving files, refer to Chapter 3.
4. Choose one of the following options:
   - **Global (ALT+G)** to edit global parameters such as system, input/output, communications options, etc.
   - **Chnl 1 (ALT+1)** to edit channel 1 parameters.
   - **Chnl 2 (ALT+2)** to edit channel 2 parameters.
   - **Done (ALT+D)** to exit this menu.

Edit Site Parameter Set (cont.)

5. To edit parameters, use the mouse (**TAB**) to select the desired parameter. Depending on the parameter you are editing, you will have to do one of the following:

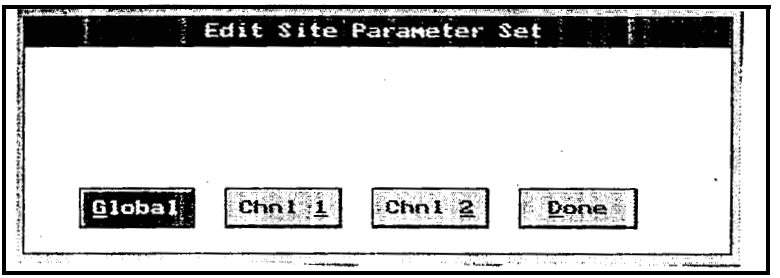
- Use the keyboard to type in the desired value, or
- Make a selection from a pop-up menu.

Use the following options (located at the bottom of each window) to switch from one window to another:

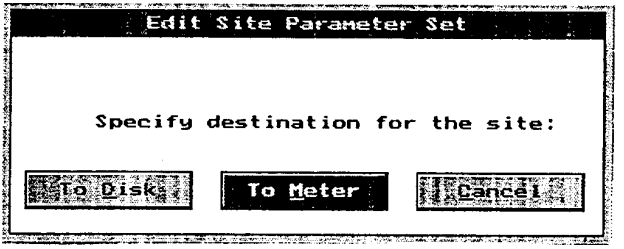
Note: *All or some of the following options will appear, depending on the window you are currently viewing.*

- **Prev (ALT+P)** switches to the previous window.
- **Next (ALT+N)** switches to the next window.
- **Done (ALT+D)** exits the edit windows.

6. Repeat steps 4 and 5 until you make all the desired changes. When you are done making changes, select **Done (ALT+D)**. A window similar to the one below appears.



7. Select **Done (ALT+D).** A window similar to the one below appears.



Saving a Set

1. Choose one of the following options:

- **To Disk (ALT+D)** to save a site set to your PC's hard disk or floppy.
- **To Meter (ALT+M)** to save a site set to the TransPort's memory.
- **Cancel (ALT+C)** to exit this command.

2. If you chose **To Disk**, skip to step 3. If you chose **To Meter**, do one of the following:

- Select **New Site (ALT+N)** to enter a new site name, and select **OK (ALT+O)**.
- Select an existing set and then choose **Selected Site (ALT+S)** to overwrite the set.
- Select **Cancel (ALT+C)** twice to exit the Edit Site Parameter Set command without saving changes.

Caution!
If you exit this command without saving the changes, the changes will be lost.

IMPORTANT: *The working site parameter set remains unaffected by changes you make using this command unless you edit or save to the working site parameter set.*

3. To save a set **To Disk**, enter a new set name in the **FileName** box or select an existing set to overwrite. Select **OK (ALT+O).** For more information on saving files to disk, refer to Chapter 3.

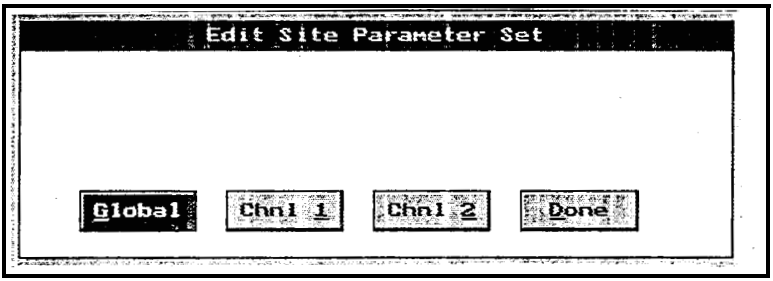
When TDM completes the task, it automatically exits to the Main Screen.

New Site Parameter Set

This command enables you to create a new site parameter set as follows:

Entering Set Parameters

1. Select the **New Site Parameter Set** command (**S** and **N**). A window similar to the one below appears.



2. Choose one of the following options to begin entering site parameters:
   - **Global (ALT+G)** to edit global parameters such as system, input/output, communications options, etc.
   - **Chnl 1 (ALT+1)** to edit channel 1 parameters.
   - **Chnl 2 (ALT+2)** to edit channel 2 parameters.
   - **Done (ALT+D)** to exit this menu.
3. To enter parameters, use the mouse **(TAB)** to select the desired parameter. Depending on the parameter you are entering, you will have to do one of the following:
   - Use the keyboard to type in the desired value, or
   - Make a selection from a pop-up menu.

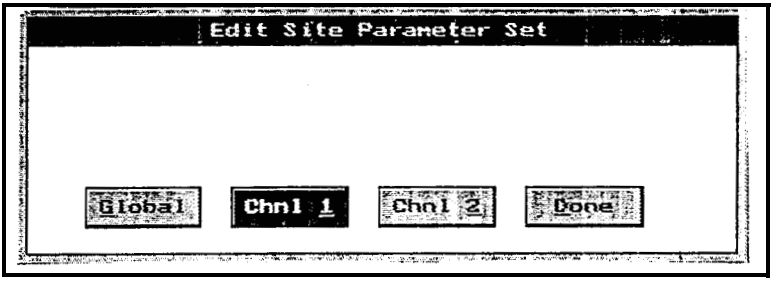
New Site Parameter Set (cont.)

Use the following options (located at the bottom of each window) to switch from one window to another:

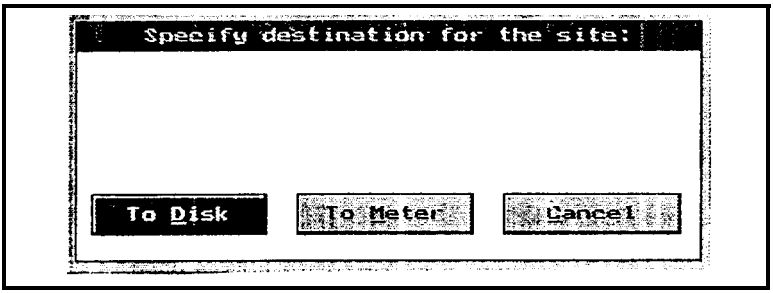
Note: *All or some of the following options will appear depending on the window you are currently viewing.*

- **Prev (ALT+P)** switches to the previous window.
- **Next (ALT+N)** switches to the next window.
- **Done (ALT+D)** exits the edit windows.

4. Repeat steps 2 and 3 until you enter the desired parameters. When you are done, select **Done (ALT+D).** A window similar to the one below appears.



5. Select **Done (ALT+D).** A window similar to the one below appears.



New Site Parameter Set (cont.)

Saving a Set

1. Choose one of the following options:

- **To Disk (ALT+D)** to save a site set to your PC's hard disk or floppy.
- **To Meter (ALT+M)** to save a site set to the TransPort's memory.
- **Cancel (ALT+C)** to exit this command.

2. If you chose **To Disk,** skip to step 3. If you chose **To Meter,** do one of the following:

- Select **New Site (ALT+N)** to enter a new site name, and select **OK (ALT+O).**
- Select an existing set and then choose **Selected Site (ALT+S)** to overwrite the set.
- Select **Cancel (ALT+C)** twice to exit the Edit Site Parameter Set command without saving changes.

Caution!

If you exit this command without saving the changes, the changes will be lost.

IMPORTANT: *The working site parameter set remains unaffected by changes you make using this command unless you edit or save to the working site parameter set.*

3. To save a set **To Disk,** enter a new set name in the **FileName** box or select an existing set to overwrite. Select **OK (ALT+O)**. For more information on saving files to disk, refer to Chapter 3.

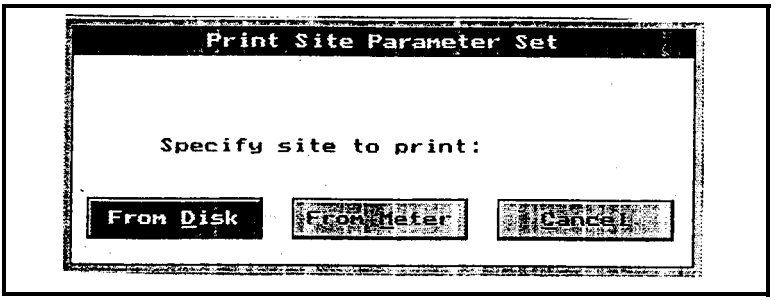
IMPORTANT: *The working site parameter set remains unaffected by changes you make using this command unless you edit or save to the working site parameter set.*

When TDM completes the task, it automatically exits to the Main Screen.

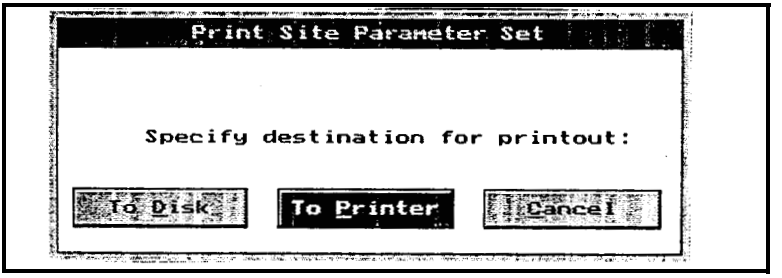
Print Site Parameter Set

This command enables you to print a stored set to a printer or a file. Use the steps below to print a set.

1. Select the **Print Site Parameter Set** command (**S** and **P**). A window similar to the one below appears.



2. Choose one of the following options:
   - **From Disk (ALT+D)** to edit a site set stored on your PC's hard disk or floppy.
   - **From Meter (ALT+M)** to edit a site set stored on the TransPort's memory.
   - **Cancel (ALT+C)** to exit this command.
3. Select the desired set. For more information on retrieving files, refer to Chapter 3. A window similar to the one below appears.



Print Site Parameter Set (cont.)

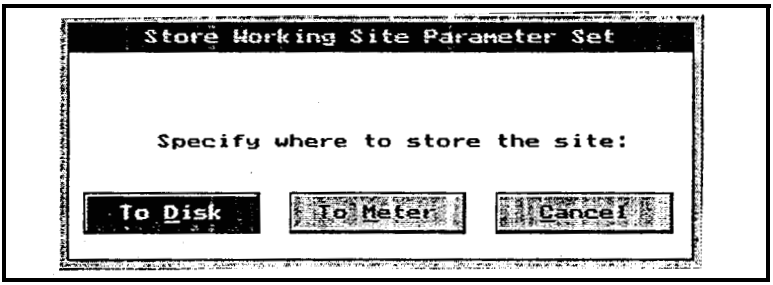
4. Choose one of the following options:

   - **To Disk (ALT+D)** to save a set to a print file and store it on the PC's hard disk or floppy.
   - **To Printer (ALT+P)** to print the set.
   - **Cancel (ALT+C)** to exit this command.

5. If you chose **To Printer**, TDM automatically sends the set to the printer. If you chose **To Disk,** enter a name in the **FileName** box or select an existing file to overwrite. Then select **OK (ALT+O).** For more information on saving files to disk, refer to Chapter 3.

Save Working Site Parameter Set

The site parameter set that the TransPort uses to take measurements is called the working site parameter set. Use the **Save Working Site Parameter Set** command to save the working set to a site set in the TransPort or on disk. To enter this command, use the mouse (**S** and **S**). Once you execute this command, a window similar to the one below appears.



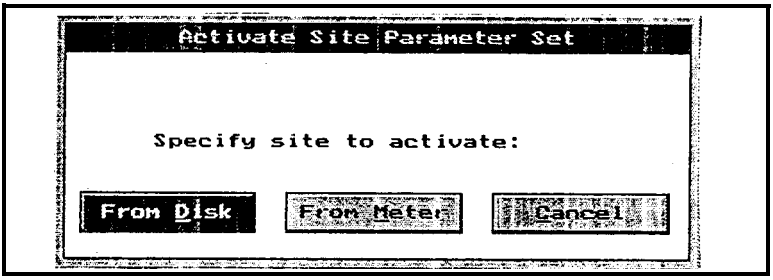
1. Choose one of the following options:
   - **To Disk (ALT+D)** to save a site set to your PC's hard disk or floppy.
   - **To Meter (ALT+M)** to save a site set to the TransPort's memory.
   - **Cancel (ALT+C)** to exit this command.
2. If you chose **To Disk**, skip to step 3. If you chose **To Meter,** do one of the following:
   - Select **New Site (ALT+N)** to enter a new site name, and select **OK (ALT+O).**
   - Select an existing set and then choose **Selected Site (ALT+S)** to overwrite the set.
   - Select **Cancel (ALT+C)** to exit this command without saving the working site.
3. To save the working set **To Disk,** enter a new set name in the **FileName** box or select an existing set to overwrite. Select **OK (ALT+O).** For more information on saving files to disk refer to Chapter 3.

TDM saves the set to the specified destination and automatically exits to the Main Screen.

Activate Site Parameter Set

Use the **Activate Site Parameter Set** command to retrieve a site parameter set and use it as the working site parameter set. To activate a site set:

1. Select the **Activate Site Parameter Set** command (**S** and **A**). A window similar to the one below appears.



2. Choose one of the following options:

   - **From Disk (ALT+D)** to edit a site set stored on your PC's hard disk or floppy.
   - **From Meter (ALT+M)** to edit a site set stored on the TransPort's memory.
   - **Cancel (ALT+C)** to exit this command.

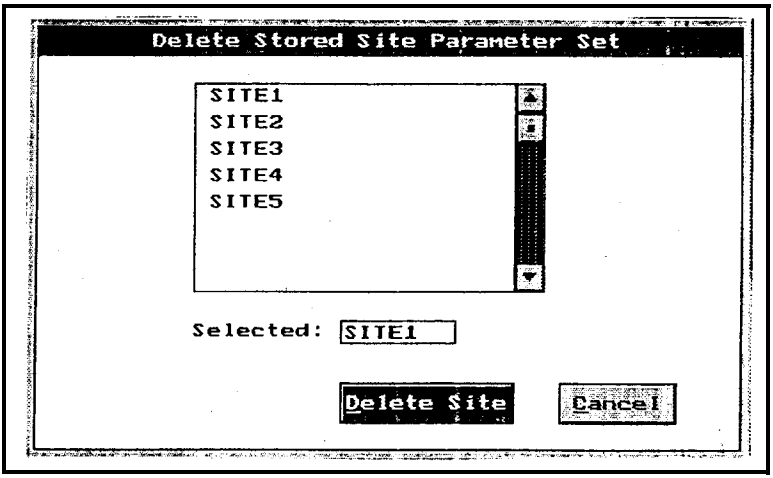
3. Select the desired site set. For more information on retrieving files refer to Chapter 3.

TDM recalls the selected set and automatically exits to the Main Screen. This set now becomes the Working Set.

Delete Site Parameter Set

This command enables you to erase a site parameter set from the TransPort's memory only. To delete a site set:

1. Use the mouse (**S** and **D**) to select this command. A window similar to the one below appears.



2. Select the desired site set. For more information on selecting sets, refer to Chapter 3.
3. Select **Delete Site (ALT+D)**.

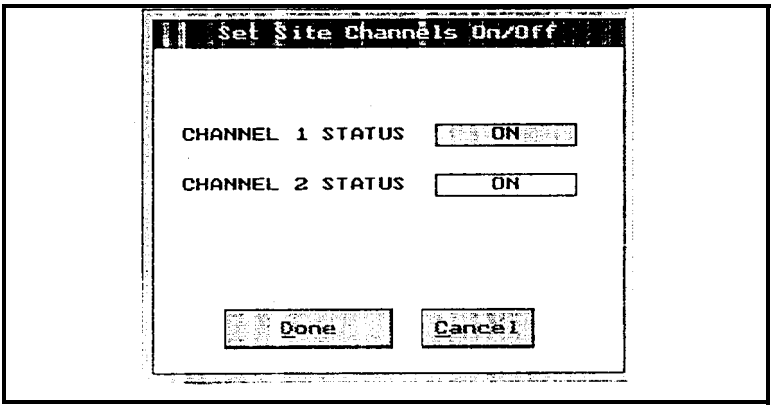
Note: *To delete site sets stored on your PC, use the DOS delete command.*

TDM deletes the specified site and returns to the Main Screen.

Read/Edit Site Channel Status

This command activates and disables each channel. To read or edit the channel status:

1. Select the **Read/Edit Site Channel Status** command (**S** and **R**). A window similar to the one below appears.



2. To change the channel status, click on the box next to each channel (**TAB** and **ENTER**).

Note: *You must have at least one active channel.*

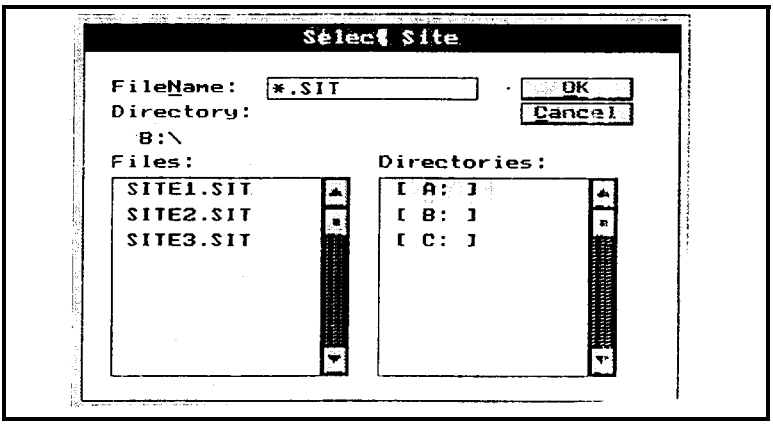
3. Select **Done (ALT+D)** to exit.

TDM performs the task and exits to the Main Screen.

Download Set from Disk

The **Download Set from Disk** command transfers stored site parameter sets from your PC to the TransPort's memory. (To transfer a set from the TransPort to your PC, refer to *Upload Set to Disk* on the next page.) Use the steps below to download a set.

1. Select the **Download Set from Disk** command (**S** and **W**). A window similar to the one below appears.



2. Select the set you want to download. See Chapter 3 for more information about selecting a file from disk.

Now that you have selected a set to download, TDM prompts you to give the set a name for storage in the TransPort's memory.

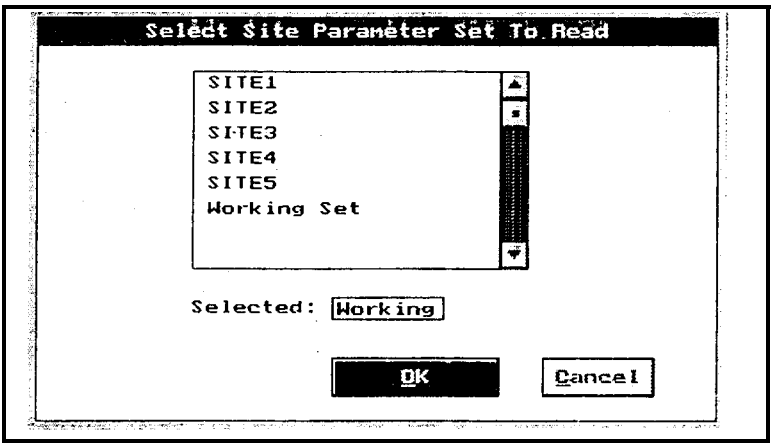
3. Give the set a new name or overwrite an existing set in the TransPort's memory. See Chapter 3 for more information about saving files.

TDM downloads the set with the assigned name to the TransPort's memory and exits to the Main Screen.

Upload Set to Disk

The **Upload Set to Disk** command enables you to upload a site parameter set from the TransPort's memory and store it on your PC's hard drive or a floppy disk. Use the steps below to upload a set.

1. Select the **Upload Set to Disk** command (**S** and **U**). A window similar to the one below appears.



2. Select the desired set to upload (**TAB** and **ENTER**). The selected set appears in the **Selected** box.

Note: *To scroll through all the sets available in the list, place the mouse cursor over the downward arrow on the right side of the list box and press the left mouse button. The TAB and arrow keys perform the same function.*

3. Select **OK (ALT+O)**.

Now that you have selected a set to upload, TDM prompts you to give the set a name for storage on your PC's hard drive or floppy disk.

4. Give the set a new name or overwrite an existing set. See Chapter 3 for more information about saving files.

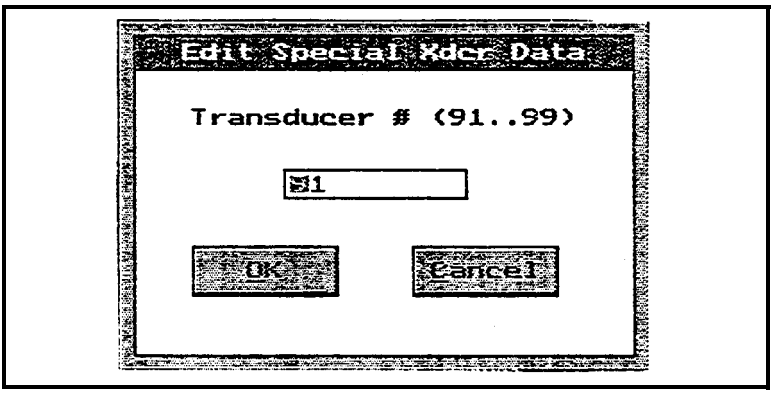
Edit Special Xdcr Entry

The last command in the Sites Menu enables you to edit special transducer parameters. (Refer to Appendix C in your *Model PT868 User's Manual* for more information about special transducers.)

This command only edits the special transducer information. If you want to use the new transducer information with an existing site, you must re-enter the special transducer number into the desired set using the **Edit Site Parameter Set** command (see page 4-14).

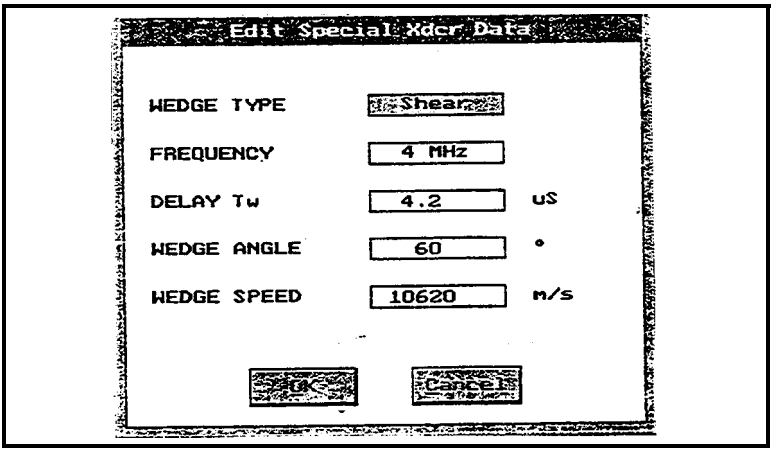
To edit special transducer parameters:

1. Select the **Edit Special Xdcr Entry** command (**S** and **X**). A window similar to the one below appears.



2. Use the keyboard to enter the special transducer number.
3. Select **OK (ALT + O)**. A window similar to the one below appears.

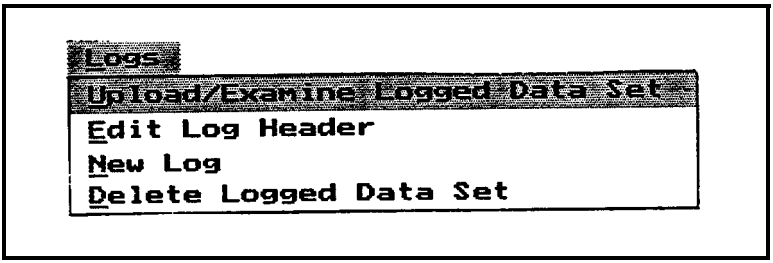
Edit Special Xdcr Entry (cont.)



4. To edit values, use the mouse (TAB and ENTER) to select the desired parameter. Depending on the parameter you are editing, you will have to do one of the following:
   - Use the keyboard to type in the desired value, or
   - Make a selection from a pop-up menu.
5. When you are done editing, select **OK (ALT + O)**.

TDM automatically writes the changes to the TransPort's memory and exits to the Main Screen.

Logs Menu



The Logs Menu consists of four commands you can use to view and edit log headers, upload a logged data set, create and delete logs. The Logs Menu consists of the following commands:

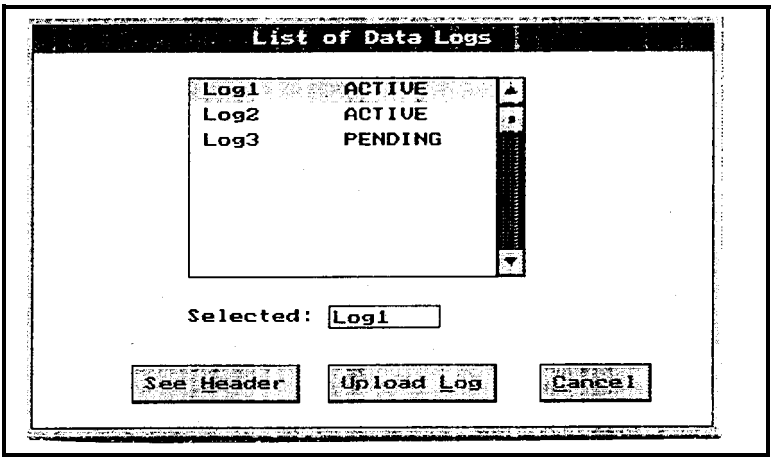
- **Upload/Examine Logged Data Set** - uploads a logged data set to a specified storage area or enables you to view log header information.
- **Edit Log Header -** lets you edit the log message, the start time and date, the end time and date, the log parameters, and the log interval.
- **New Log** - creates a new log.
- **Delete Logged Data Set** - erases a selected log.

Upload/Examine Logged Data Set

The first command enables you to upload logs from the TransPort's memory to your PC and to view log header information for any log stored in the TransPort's memory. The log header contains the log message, the start time and date, the end time and date, the log parameters, and the log interval.

Note: *You can only upload completed or active logs, not pending logs.*

1. Select the **Upload/Examine Logged Data Set** command (**L** and **U**). A window similar to the one below appears.

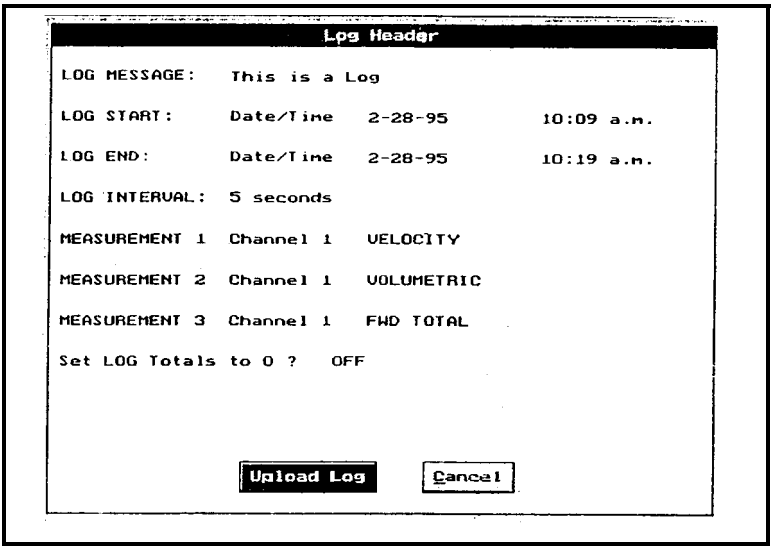


2. Select the log you want to view or upload. For more information on retrieving files refer to Chapter 3.

Now that you have selected the log, use the appropriate steps that follow to either view or upload the log.

View a Log Header

1. Select the **See Header** command **(ALT + H)**. A screen similar to the one below appears.


Log Header
LOG MESSAGE: This is a Log
LOG START: Date/Time 2-28-95 10:09 a.m.
LOG END: Date/Time 2-28-95 10:19 a.m.
LOG INTERVAL: 5 seconds
MEASUREMENT 1 Channel 1 VELOCITY
MEASUREMENT 2 Channel 1 VOLUMETRIC
MEASUREMENT 3 Channel 1 FWD TOTAL
Set LOG Totals to 0 ? OFF
Upload Log
Cancel

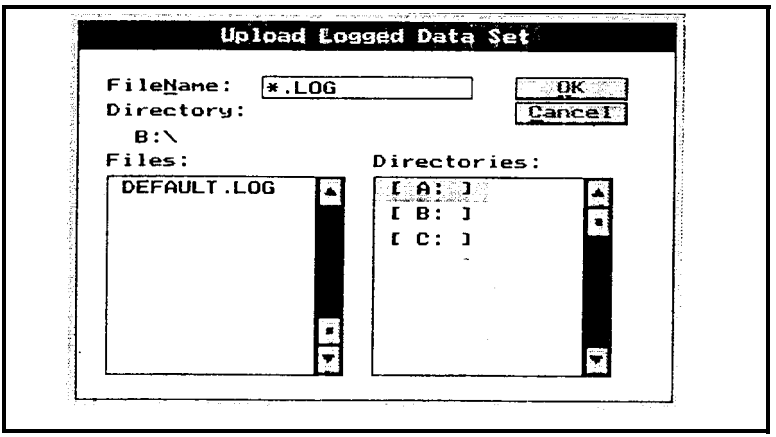
2. When you are finished viewing the log header information you can either:

- exit this command (**ALT + C**), or
- upload the log from the TransPort to your PC (refer to the next section for instructions).

Note: *If you want to edit the log header, refer to page 4-35.*

Uploading a Log to the PC

1. Select the **Upload Log** command (**ALT + L**).
2. Select **OK** (**ALT + O**). A window similar to the one below appears.



This window prompts you to select the desired storage location on your PC (hard disk or floppy disk) and enter a name for the log file.

3. If you want to upload the log to a floppy disk, insert the disk into the PC's disk drive.
4. Enter a new log name in the FileName box or select an existing log to overwrite. Select **OK (ALT+O)**. For more information on saving files on disk, refer to Chapter 3.

TDM uploads the log and automatically exits to the Main Screen.

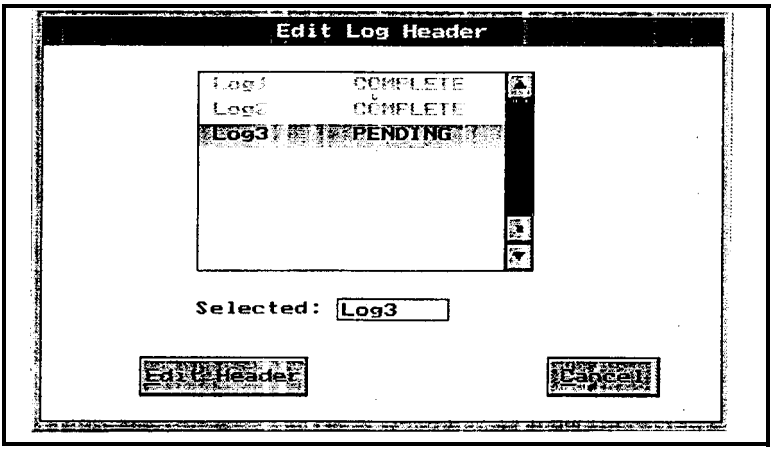
Edit Log Header

Each log has a log header that consists of the log message, the start time and date, the end time and date, the log parameters, and the log interval. You can use this command to edit any of these parameters for pending or active logs that are stored in the TransPort's memory.

Note: *You may not be able to edit all of the log header parameters. For example, you will not be able to edit the start time for an active log.*

To edit the log header:

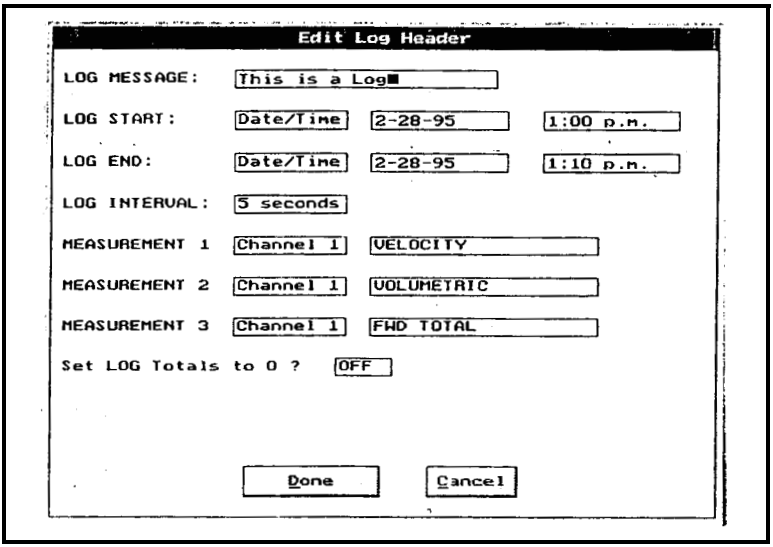
1. Select the **Edit Log Header** command (**L** and **E**). A window similar to the one below appears.



2. Select the desired log. For more information on retrieving files, refer to Chapter 3.

Edit Log Header (cont.)

3. Select **Edit Header (ALT + E).** A window similar to the one below appears.


Edit Log Header
LOG MESSAGE: This is a Log
LOG START: Date/Time 2-28-95 1:00 p.m.
LOG END: Date/Time 2-28-95 1:10 p.m.
LOG INTERVAL: 5 seconds
MEASUREMENT 1 Channel 1 VELOCITY
MEASUREMENT 2 Channel 1 VOLUMETRIC
MEASUREMENT 3 Channel 1 FWD TOTAL
Set LOG Totals to 0 ? OFF
Done
Cancel

4. To edit values, use the mouse (**TAB** and **ENTER**) to select the desired parameter to edit. Depending on the parameter you are editing, you will have to do one of the following:

- Use the keyboard to type in the desired value.
- Make a selection from a pop-up menu.

Note: *You can only edit the values that are surrounded by boxes. If the selected log is pending, you can edit all the values. If the log is active, you can only edit the end date and time.*

5. When you have finished editing, select **Done (ALT+D)** to exit.

TDM writes the changes to the log header and automatically exits to the Main Screen.

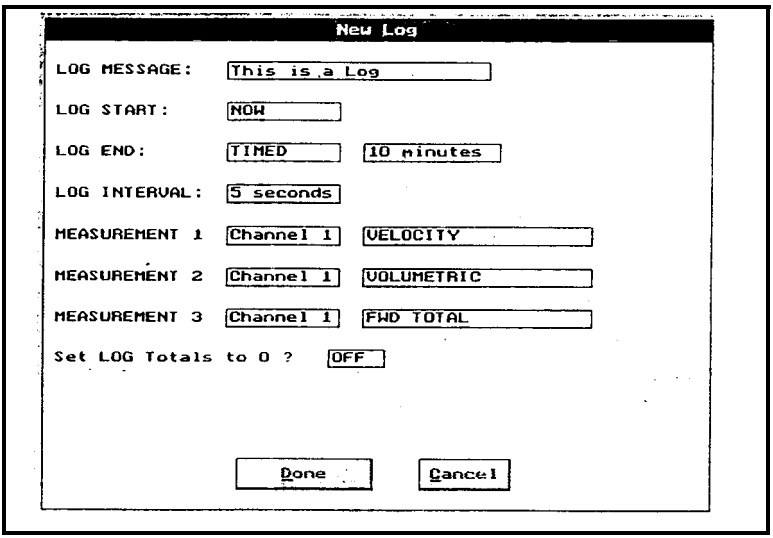
New Log

To create a new log, you must enter the log message, the start date and time, the end date and time, the log interval, and log parameters using the **New Log** command.

Note: *The new log will be stored in the TransPort's memory. You can upload this log, after it is completed, using the Upload/Examine Logged Data Set command as described on page 4-31.*

To create a new log:

1. Select the **New Log** command (**L** and **N**). A window similar to the one below appears.


New Log
LOG MESSAGE: This is a Log
LOG START: NOW
LOG END: TIMED 10 minutes
LOG INTERVAL: 5 seconds
MEASUREMENT 1 Channel 1 VELOCITY
MEASUREMENT 2 Channel 1 VOLUMETRIC
MEASUREMENT 3 Channel 1 FWD TOTAL
Set LOG Totals to 0 ? OFF
Done
Cancel

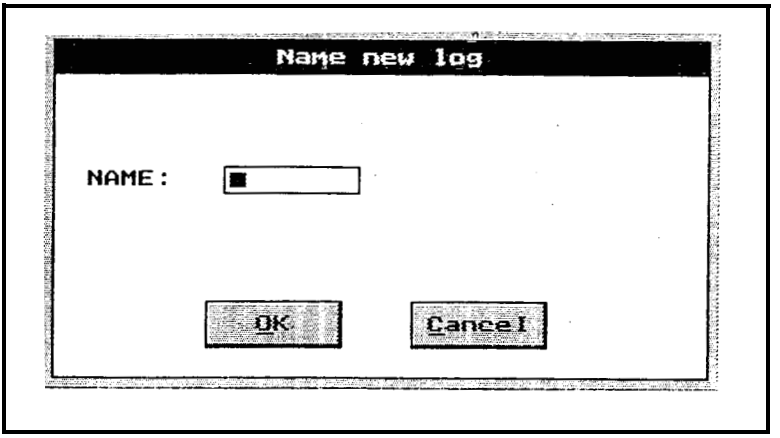
2. To edit values, use the mouse (**TAB** and **ENTER**) to select the desired location to edit. Depending on the parameter you are editing, you will have to do one of the following:

   - Use the keyboard to type in the desired value.
   - Make a selection from a pop-up menu.

New Log (cont.)

IMPORTANT: *The log start date and time must exceed the current date and time of both the TransPort and PC clocks. Additionally, the log end date and time must exceed the log start time by at least 5 minutes.*

3. Select **Done (ALT + D)**.The following screen appears.



4. Type in the new log name.

5. Select **OK** (**ALT + O**).

TDM creates the new log and automatically exits to the Main Screen.

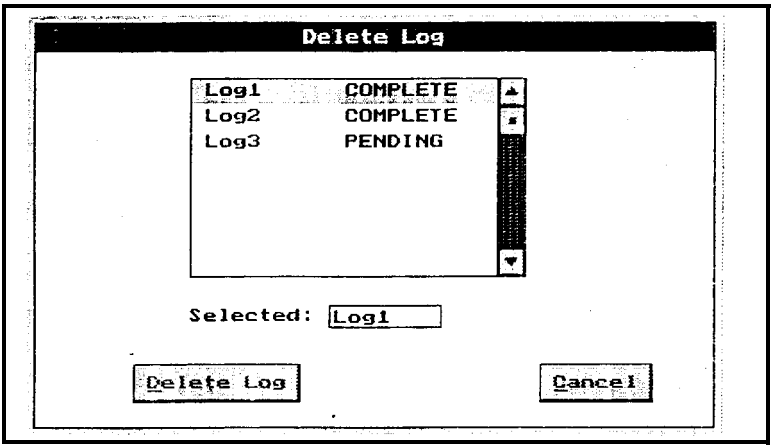
Delete Logged Data Set

This command enables you to delete unwanted logs from the TransPort's memory.

Note: *You can delete active, pending and completed logs.*

To delete a log:

1. Select the **Delete Logged Data Set** command (**L** and **D**). A window similar to the one below appears.



2. Select the log you want to delete.
3. Select **Delete Log (ALT + D).**

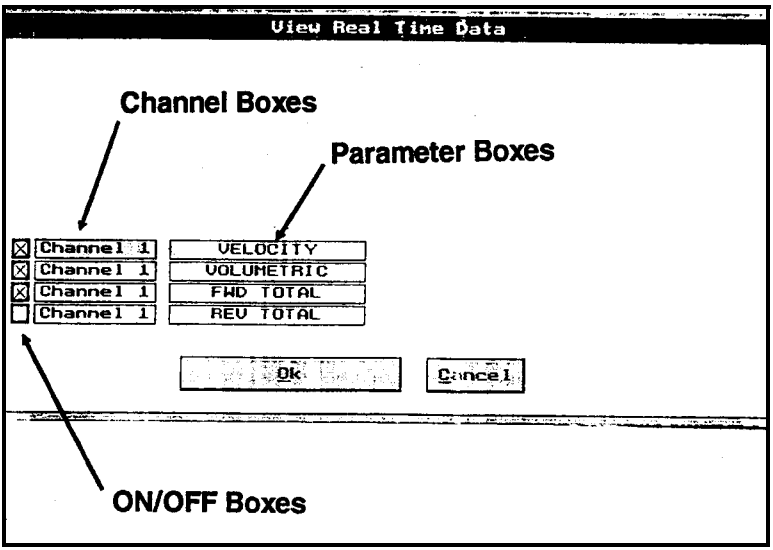
TDM deletes the log from the TransPort's memory and automatically exits to the Main Screen.

Real Time Menu

You can use the Real Time Menu to view or log live measurements from the TransPort directly to your PC screen. (Refer to Appendix B to print the TDM screen) Use the following steps to view or log real-time data for the desired channel.

View Real Time Data

1. Select the **View Real Time Data** command (**R** and **V**). A window similar to the one below appears.



View Real Time Data (cont.)

TDM enables you to view up to four parameters using any combination of measurements and channel parameters you desire. The Real-Time Data window displays four ON/OFF boxes, four channel boxes and four parameter boxes (see the illustration on the previous page). Use these boxes to display the desired parameters as follows:

2. Click on the ON/OFF box (**TAB** and **ENTER**). An "X" inside a box indicates that the parameter will display. To shut off a parameter, click on the box (**TAB** and **ENTER**). When the "X" disappears, the parameter will not display.
3. View the selections for the channel box (**TAB** and **ENTER**).
4. Make a selection (**TAB** and **ENTER**) and select OK (**ALT+O**).
5. View the selections for the parameter box (**TAB** and **ENTER**).
6. Make a selection (**TAB** and **ENTER**) and select **OK** (**ALT+O**).
7. Repeat steps 2 through 6 to view the desired parameters.
8. When you are done, select **OK (ALT+O)**.

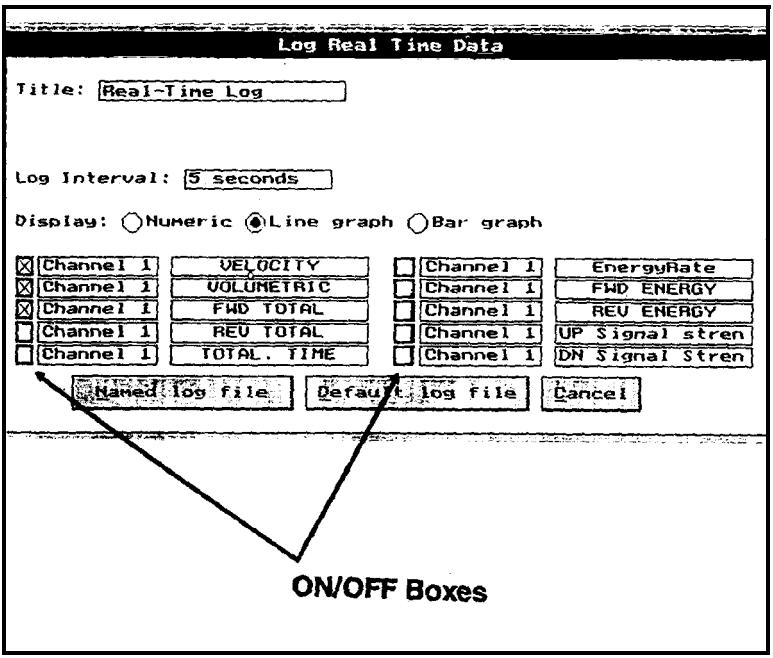
To exit the **View Real Time Data** command, select **Stop (ALT+S).**

Note: *TDM only displays the highest priority error code (lowest number error). TDM only shows errors for displayed channels.*

Log Real Time Data

This command lets you simultaneously view and log parameters. You can display the real-time log in data-list form or in a line or bar graph. Use the steps below to view and log real time measurements.

1. Select the **Log Real Time Data** command (**R** and **L**). A window similar to the one below appears.



2. To edit values, select the desired parameter to edit (**TAB** and **ENTER**). Depending on the parameter you are editing, you will have to do one of the following:

   - Use the keyboard to type in the desired value.
   - Make a selection from a pop-up menu.

Note: *When making your selections, make sure you activate or deactivate the desired parameters using the ON/OFF boxes (see the illustration on page 4-39).*

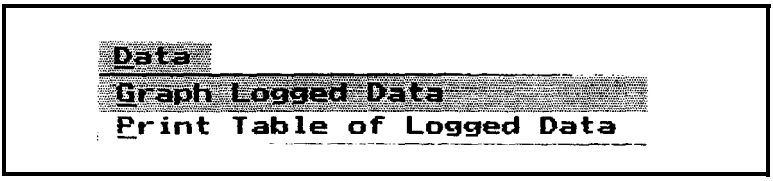
Log Real Time Data (cont.)

3. After you make the desired selections, you can do one of the following:

- Select **Default log file** (**ALT+D**) to save the log as "default.log" to the TDM directory on your PC's hard disk.
- Select **Named log file** (**ALT+N**) to give the log a new name or overwrite an existing log on your PC.
- Select **Cancel (ALT+C)** to exit this command and return to the Main Screen.

If you do not select **Cancel,** the real time log appears in the selected display format (numeric, line or bar graph).

Data Menu



The Data Menu provides two commands for you to view and print logged data. You can view data on your PC's screen in a line or bar graph, print out logged data in table form, or save it as an ASCII file that you can import into a spreadsheet or other program.

Graph Logged Data

Each type of graph displays up to three logged parameters simultaneously. You can only view logs that have been uploaded to your PC. If the log you want to view is stored in the TransPort's memory, use the **Upload Logged Data Set** command to upload the log (see page 4-31), then use the steps that follow to view it. (Refer to Appendix B to print site data.)

1. Select the **Graph Logged Data** command (**D** and **G**).
2. Select the desired graph type (**TAB** and **ENTER**).
3. Select **OK (ALT+O)**.
4. Select the desired log. For more information on retrieving files from disk, refer to Chapter 3.

TDM loads the logged data into the desired graph type. An example of a line graph is shown in Figure 4-1 on the next page.

Graph Logged Data (cont.)

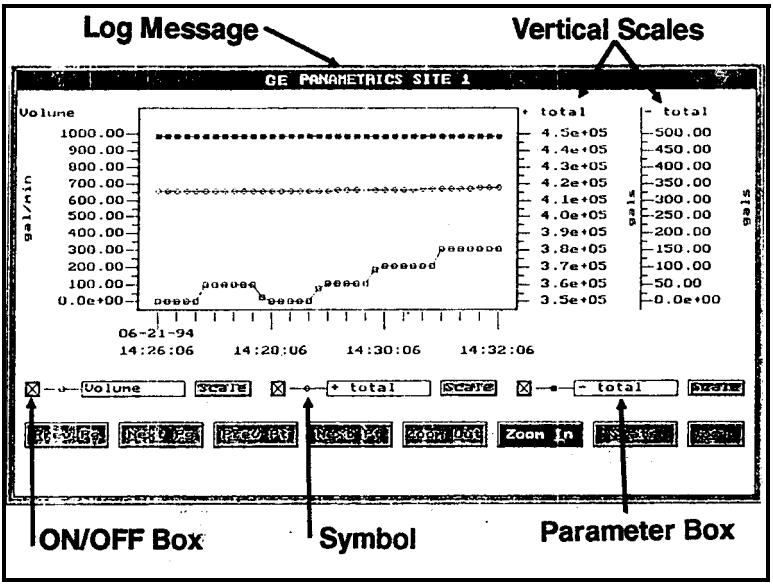


Figure 4-1: An Example of a Line Graph

Description of the Graph Display

The box at the top of the screen displays the log message. Directly below the log message is the graph. There are three vertical scales on the graph, one on the left side and two on the right side. Each corresponds to one of the log parameters. The time is displayed horizontally below the graph.

Since up to three logged parameters display simultaneously, each parameter is assigned a symbol. Symbols and their corresponding parameters are shown in Figure 4-1 above. To change the parameter, click on the parameter box and select the desired parameter to display.

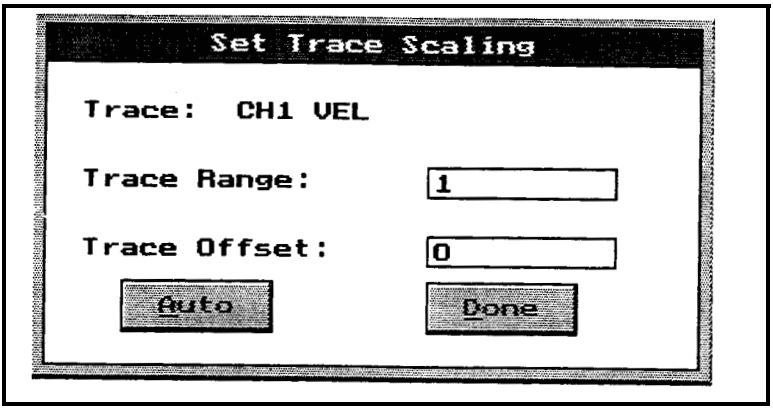
To the left of each symbol is an ON/OFF box. An "X" inside a box indicates that the parameter is displaying on the graph. To shut off a parameter, click on the box (**TAB** and **ENTER**). When the "X" disappears, the parameter also disappears from the graph. When you click on the ON/OFF box again (**TAB** and **ENTER**), the parameter displays again.

Using the Line and Bar Graphs

The **Graph Logged Data** command enables you to adjust the graph scale and offers a number of options for viewing data.

A. Adjusting the Scale

1. To adjust the range and offset values for each parameter, click on the Scale Box to the right of each symbol (**TAB** and **ENTER**). A window similar to the one below appears.



2. Enter the desired values for the range and offset or select **Auto (ALT+A)** and TDM will re-scale the graph automatically.

3. Select **Done (ALT+D).**

The graph re-draws with the new scale values.

B. Viewing Data

TDM has a series of options on the bottom of the screen that let you view the graph in various ways. Use your mouse (or the keys indicated) to access the following options:

- **Prev Pg - (ALT +P)** to move back one graph screen.
- **Next Page - (ALT + N)** to move forward one graph screen.
- **Prev Pt - (ALT + R)** to move back one data point.
- **Next Pt - (ALT + E)** to move forward one data point.
- **Statistics - (ALT +S)** displays the log message, the total number of data points for the log, the log start date and time, and the log end date and time. Statistics also displays the minimum, maximum, and mean (average) of all values except forward and reverse totals. Instead of displaying the mean for totals, the difference between the first and last reading is displayed.
- **Exit** - (**ALT +X**) exits the Graph Logged Data command.

If you choose to display data in a line graph, the graph displays 18 data points. TDM provides two more options for increasing or decreasing the amount of data points displayed on the screen.

- **Zoom Out** - **(ALT + O)** doubles the number of data points shown on the graph each time you click on this button. You can display up to a maximum of approximately 288 data points.
- **Zoom In - (ALT +I)** displays half as many data points as previously shown on the graph. Each time you click on this button, the graph halves the amount of data points shown. The maximum zoom-in is 18 points per screen.

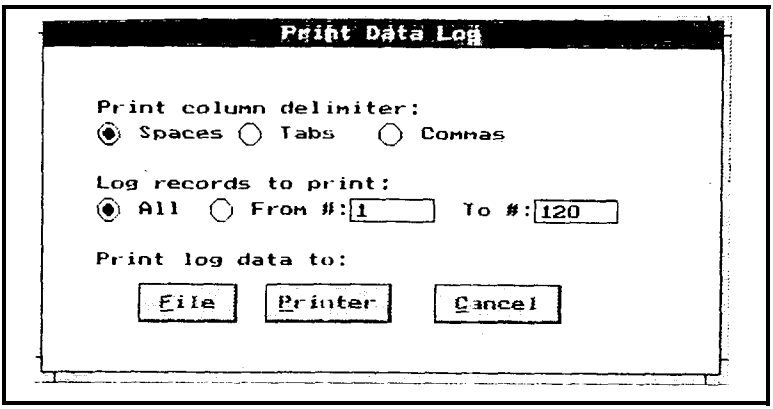
Print Table of Logged Data

This command lets you print or save a log in a table format. You can send the log directly to a printer or save it as an ASCII file so you can import it into a spreadsheet or other program. (See Appendix C for more information on importing ASCII files into spreadsheet programs.)

Note: *The log you want to print or save must be stored on your PC's hard disk or a floppy disk. If you want to use a log stored in the TransPort, use the* ***Upload/Examine Log Data Set*** *command to upload the desired log to your PC.*

To print or save a log:

1. Select the **Print Table of Logged Data** command (**D** and **P**).
2. Select the desired log. For more information on retrieving files from disk, refer to Chapter 3. A window similar to the one below appears.



3. Select the appropriate column delimiter (**TAB** and **ENTER**). A column delimiter is a character that separates items of data.

If you intend to import the ASCII file into a database or spreadsheet program, you should consult the program's manual to find out what type of column delimiter you should select. If the manual does not specify the type of column delimiter, select commas.

Print Table of Logged Data (cont.)

Note: *You do not have to select a column delimiter when sending a log to the printer.*

4. Select the number of records from the desired log you want to save or print (**TAB** and **ENTER**).Refer to page 6-1 in your *PT868 User's Manual* for a description of records.

You can now either send the log to a printer or save it as an ASCII file.

Saving a Log as an ASCII File

1. Select **File (ALT+F)**.
2. TDM prompts you to name the ASCII file. Enter a new name or overwrite an existing file. Refer to Chapter 3 for more information on saving files to disk.
3. Select **OK (ALT+O)**.

TDM writes the log to an ASCII file and exits to the Main Screen.

Printing a Log

To send a log to the printer, select **Printer (ALT+P).**

TDM sends the log to the printer and automatically exits to the Main Screen.

Appendix A
Making Copies of the TDM Source Disk

You should make at least one copy of the TDM source disk. You may use any program utility or method to copy the source disk; however, if one is not available to you, you can use MS-DOS to make a copy as described in this section. Refer to the appropriate section that follows to make copies.

Copying Source Disk Using Two Floppy Disk Drives

Use the following steps to make a copy if your PC has two high-density disk drives:

1. Turn on your computer and display.
2. Insert the TDM disk into drive `a`.
3. Insert a blank formatted high-density disk in drive `b`.
4. At the `C:\` prompt, type `copy^a:*.*^b:`
5. Press the **ENTER** key.

The following message appears on the screen:

```
A: TDM.EXE
A: TDM.CFG
     2 File(s) copied
```

This message indicates your computer has successfully copied the TDM program files to the disk in drive `b.`

Copying Source Disk Using One Floppy Disk Drive

Use the following steps to make a copy if your PC has one high-density disk drive.

1. Turn on your computer and monitor.
2. Insert the TDM disk (source disk) into drive `a.`
3. At the `C:\` prompt, type `diskcopy^a:^a:` and press the **ENTER** key.
4. Follow the directions on your screen.

Appendix B
Printing the TDM Screen

TDM does not provide a command to print site data, real-time data, or log graphs as they appear on your PC screen; however, you can use the graphics command in MS-DOS 5.0 or higher to print the TDM screen.

Refer to your MS-DOS manual for more information on using the graphics command. Once you execute the graphics command (which must include the proper parameters and switches), enter TDM. Once TDM is running, use the proper TDM command to display the information you want to print. For example, if you want to print a log graph, use the Upload/Examine Log Data Set to upload the log and then use the Graph Logged Data command to display the log graph on your PC.

To print the log graph, press **SHIFT + PRINT SCREEN**.

IMPORTANT: *Once you press the* **SHIFT + PRINT SCREEN** *keys, do not move the mouse cursor or touch the keyboard until the screen is printed. If you touch the mouse or keyboard, the printer will print the mouse movements and/or the results of the keyboard strokes.*

Appendix C
Importing TransPort ASCII Files into Spreadsheet Programs

This section describes the procedure for importing TransPort ASCII files into several popular spreadsheet programs. If the procedure for importing text into the spreadsheet program you are using is not discussed in this section, refer to the importing guidelines on page C-6.

Procedures for Specific Programs

A. Lotus 1-2-3

Lotus accepts tabs, commas, or spaces as delimiters for the TDM ASCII file.

Importing a TDM ASCII files into Lotus requires the following procedures:

- Importing the file
- Parsing the file
- Reformatting the time column

Importing the File

1. Run Lotus.
2. Place the cell pointer in the cell where you want data to begin (e.g., cell A1).
3. Select /File Import Text.
4. Enter the file name (including the path) that you want to import. Be sure to include the PRT extension.

Note: *If you do not remember the file name or location, select List and use the backspace to view the directory information.*

Importing the File (cont.)

Lotus automatically imports the selected file into your spreadsheet. Although the data might appear to be in columns in your spreadsheet, Lotus actually placed each line of the data from the TDM file into the cell in the left-most column of your spreadsheet. Therefore, you cannot plot this data until you separate (parse) the data in each cell into its own column. For example, date, time and each flow measurement value should be placed in its own column.

Parsing the File

Use the following procedure to separate the imported file into individual columns.

1. Place the cell pointer on the left-most cell of the first line of data that includes the date, time and three values.
2. Select /Data Parse Format-Line Create.

Lotus inserts a format-line above the line you selected representing how it plans to parse the data. Format-lines contains the following symbols:

Symbol	Description
L	Represents the first character of a label block.
T	Represents the first character of a time block.
V	Represents the first character of a value block.
>	Represents characters in a data block. For example, Lotus displays a value block that is four characters wide as V>>>.
*	Represents a blank space that can become part of a data block in any label that requires extra characters.

Parsing the File (cont.)

```
L>>>>>*****T>>>>>*****V>>>*****V>>*******V>>
```

Figure C-2: An Example of a Format-Line

3. Select Input-Column.
4. Highlight the left-most column (date) beginning with the format-line and ending with the last log entry.
5. Press **ENTER.**
6. Select Output-Range.
7. Place the cell pointer on the left-most cell of the first line of data that includes the date, time and three values.
8. Press **ENTER.**
9. Select Go.

Lotus automatically parses (separates) the data into columns. Lotus may have also reformatted the time column. Use the following section to reformat the time column.

Reformatting the Time Column

1. Select /Range Format Date Time.
2. Select the desired time format.
3. Highlight the data in the time column.
4. Press **ENTER.**

Lotus reformats the time column into the specified format. If the time column shows all asterisks, adjust the column width using the Worksheet Column Set Width commands. Then use the arrow keys to adjust the column to the desired width.

Note: *When you plot data, Lotus defaults to the parsed time format; however, you can use the Graph Options Scale X-Scale Format Date Time commands to change the format.*

B. PlanPerfect

PlanPerfect accepts tabs or commas as column delimiters.

1. Run PlanPerfect without specifying a filename.
2. Once PlanPerfect is running, press **CTRL + F5** to enter the Convert Menu.
3. Select the following commands:
   - File
   - Import/export
   - Other
   - Change format
4. Set Row delimiter to [HRT] and press **F7**.
5. Set Column delimiter to [TAB] or (,) as appropriate and press **F7**.
6. Set Space filled to Yes
7. Select Import and specify the print file name.

C. Microsoft Excel

Microsoft Excel accepts tabs or commas as column delimiters.

1. Run Excel without specifying a filename.
2. Select the File menu.
3. Select Open.
4. Press the Text button.
5. Set Delimiters to tabs or commas as appropriate.
6. Set File origin to either DOS or Windows (either one will work).
7. Press the OK button to return to the Open window.
8. Enter the name of the log print file and press the OK button.

D. Quattro Pro

Quattro Pro accepts commas as column delimiters.

1. Run Quattro Pro without specifying a filename.
2. Select the Tools menu.
3. Select Import.
4. Select Commas only.
5. Enter the full path name of the log print file and press (ENTER).

Import Guidelines

Before you begin importing the file, make sure you review the documentation for your spreadsheet or data processing program, and determine whether it can import data from DOS or ASCII text files.

Take note of whether the program can accept tabs or commas as delimiters when importing data; TDM can output these as delimiters in print files. For best results, use tabs or commas as delimiters when possible.

Note: *The TDM Print Table of Log Data command provides options to select spaces, tabs, or commas as column delimiters. This is sufficient to satisfy most data processing programs.*

For those difficult cases, you can configure TDM to output any 8-bit character as a print file delimiter by adding the following line to the TDM.CFG file:

```
delimiter=123
```

where 123 is replace by the decimal equivalent of the desired character (values from 0 to 255 are allowed).

When you execute the Print Table of Log Data command in TDM, none of the delimiter options will be highlighted. (Be careful NOT to select a delimiter because the delimiter you select will override the setting in the configuration file.)

Print files will contain the delimiter character specified in the configuration file until one of the delimiter options is selected.

Import Guidelines (cont.)

1. Print the TransPort log data to an ASCII file using the preferred delimiter character.

Note: *Some data processing programs may be confused by the presence of the 6-line file header; in such cases, it will be necessary to edit the print file with a text editor or word-processing program and remove the header lines.*

2. Exit TDM.
3. Run your spreadsheet program.
4. Execute the command to import a text file and specify the field delimiters that the print file contains.

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